



**MULTI-INNO TECHNOLOGY CO., LTD.**

## **SPECIFICATION**

MI0570ETD-3  
DRIVING BOARD FOR MI0570ET-3

Revision	1.2
Engineering	
Date	
Our Reference	

Address : Room 10J,Xin HaoFang Building, No.188 Shennan Road,  
Nanshan Drstrict, ShenZhen,China.

Tel : (86-755)2643 9937

Fax : (86-755)8613 4241

Email : [sales@multi-inno.com](mailto:sales@multi-inno.com)

Web : <http://www.multi-inno.com>



---

Time	Version	Item	Remark
201105	MI0570ETD-3	Initial version	
201105	MI0570ETD-3	Exchange AV1 and AV2	
201105	MI0570ETD-3	Add YPBPR Support Mode	



A-----OverView-----page 22  
B-----Features-----page 22  
C-----Application diagram-----page 23  
D-----Power Consumption-----page 23  
E-----Outline Drawing-----page 24  
F-----Connector Interface-----page 25  
G-----Connector Define-----page 27  
H-----Remote (NEC code) and KeyBoard-----page 33  
I-----OSD Function-----page 34  
J-----Connect Example-----page 36

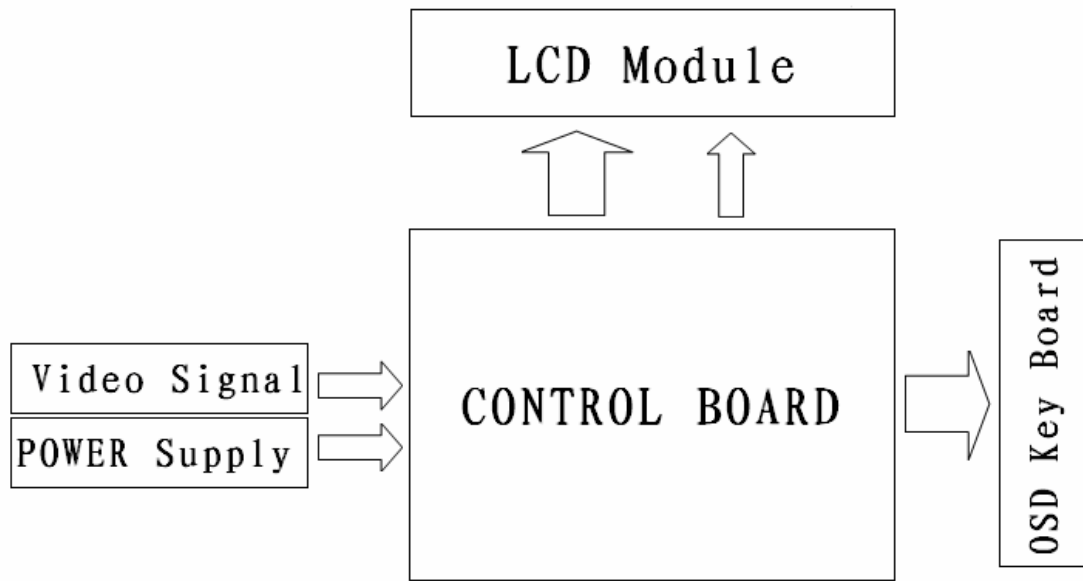
## A. Overview:

The MI0570ETD-3 is a LCD control board designed for digital TFT-LCD modules, such as MI0570ET-3, It can receive 2 channel NTSC/PAL CVBS input and 1channel S-Video input(optional) and 1 channel VGA input and 1 channel YPBPR input(optional).

## B. Features:

- Single power supply: +12V /range: +7V~+15V.
- Work Temperature: -20℃~+ 65 ℃.
- Default Setting is 2AV+VGA,YPBPR depends on Sub Menu.
- **VGA Support resolutions: 640\*350-70Hz, 640\*400-70Hz, 640\*480-60Hz 66Hz 72Hz 75Hz, 800\*600(800\*480) -56Hz 60Hz 72Hz 75Hz, 1024\*768-60Hz 70Hz 75Hz ,1280\*1024-60Hz and so on.**
- **YPBPR Support resolutions: 720x576\_50I, 720x576\_50P, 720x480\_60I, 720x480\_60P, 1280x720\_50P, 1280x720\_60P, 1920x1080\_50I , 1920x1080\_60I and so on.**
- Support OSD Functions: BRI adjust, CNT adjust, SAT adjust, Panel Rotate, Panel Scale and so on.
- Support IR functions.
- 8 Test Patterns: Red, Green, Blue, Black, White, Gray, Color Bar, Dot. Manual Adjust and Auto Loop.
- Support External Audio Board and Volume Menu Adjust.
- Support Power on Display LOGO.
- Support SPI Panel.
- Unique display image manipulation.
- NO SYNC OFF Function: No sync Off Mode, include OFF/5S/10S, the default setting is OFF.
- Car Reverse Function(Optional):
  - i) Power on, Auto switch to AV2(can be changed) when Car Reverse Voltage give. And auto switch to original status when the voltage is disappear.
  - ii) Power off, Auto switch to AV2(can be changed) when Car Reverse Voltage give. And auto switch to Power Off Mode when the voltage is disappear.
  - iii) No SYNC off, Auto switch to AV2(can be changed) when Car Reverse Voltage give. And auto switch to original status when the voltage is disappear.
  - iv) No key effect when Car Reverse Function is enable.
  - v) The MAX Voltage of the Car Reverse Function is 24V.

**C. Application diagram:**

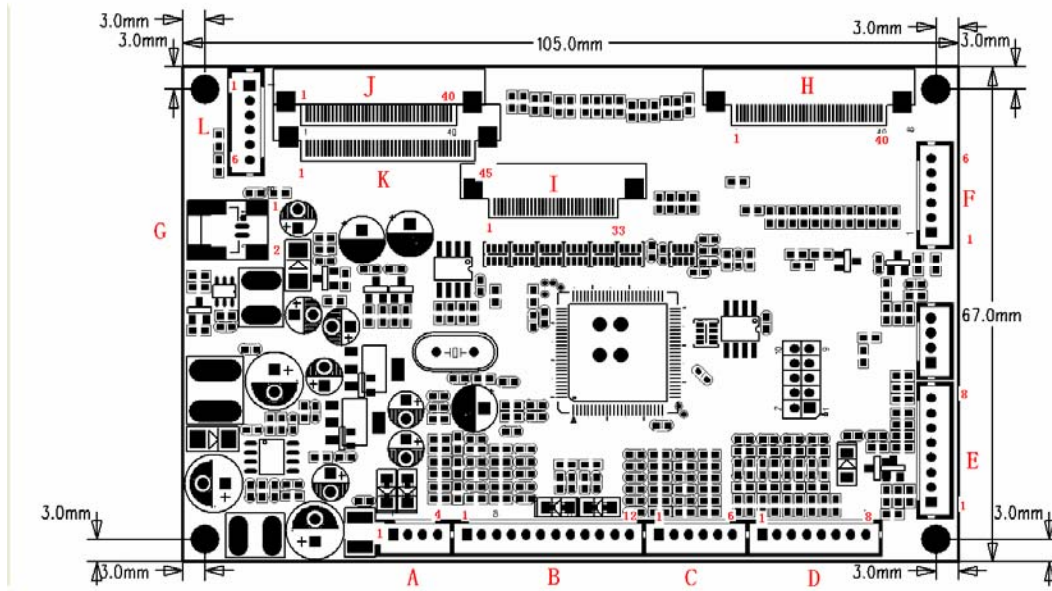


**D. Power Consumption**

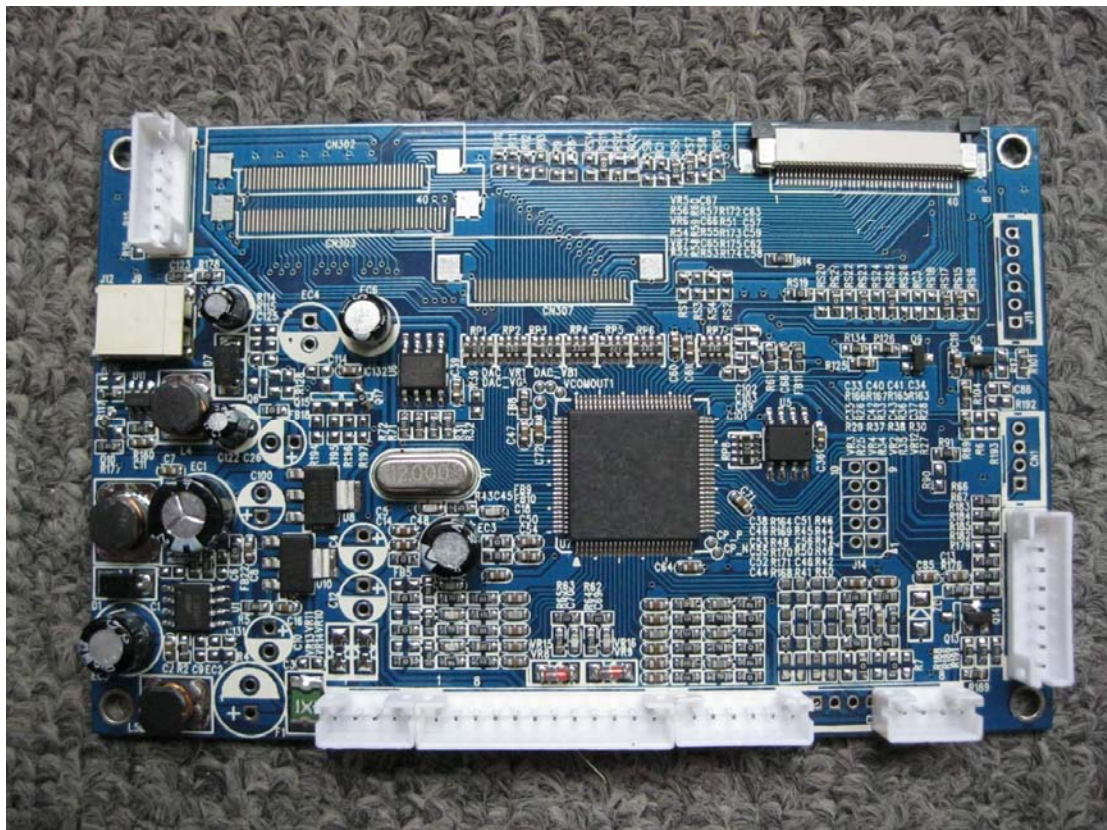
Condition	Current Consumption			Unit
	Min	Typ	Max	
Vin = 7V		TBD		mA
Vin = 12V		According to Panel		mA
Vin = 15V		TBD		mA

### E. Outline Drawing

- **Size:** 105.0mm\*67.0mm
- **Thickness:** <8mm, including PCB board.



- **Product Photo:**



**F. Connector interface description:**

Connector Number	Connector Description	Pin Number	Definition
A	POWER	1	12V
		2	12V
		3	GND
		4	GND
B	VGA IN	1	SCL
		2	SDA
		3	GND
		4	B
		5	GND
		6	G
		7	GND
		8	R
		9	GND
		10	HS
		11	VS
		12	GND
C	YPBPR IN	1	PB
		2	GND
		3	Y
		4	GND
		5	PR
		6	GND
D	VIDEO IN	1	C-Y/C
		2	GND
		3	Y-Y/C
		4	GND
		5	AV1
		6	GND
		7	AV2
		8	GND
E	FUNCTION	1	5V
		2	GND
		3	IR
		4	LED2
		5	LED1
		6	KEY2
		7	KEY1-Car Reverse
		8	GND



F	BLCTL/AUDIO	1	12V
		2	12V
		3	GND
		4	AUDIO PWM
		5	CCFLON/OFF
		6	GND
G	LED	1	HIGH
		2	LOW
L	BLCTL	1	12V
		2	12V
		3	GND
		4	GND
		5	CCFL ON/OFF
		6	CCFL ON/OFF



## G. Connector Define:

H--pitch: 0.5mm/40pin

pin	define	description
1	UD	Up/Down Control signal
2	MODE	Mode Control
3	HS	H Sync input
4	VLED	Power For LED Circuit
5	VLED	Power For LED Circuit
6	VLED	Power For LED Circuit
7	VCC	Power Voltage
8	VS	V Sync input
9	DE	Data Enable
10	GND	Ground
11	GND	Ground
12	LED-ADJ	Adjust LED Brightness
13	B5	Blue data input (MSB)
14	B4	Blue data input
15	B3	Blue data input
16	GND	Ground
17	B2	Blue data input
18	B1	Blue data input
19	B0	Blue data input (LSB)
20	GND	Ground
21	G5	Green data input (MSB)
22	G4	Green data input
23	G3	Green data input
24	GND	Ground
25	G2	Green data input
26	G1	Green data input
27	G0	Green data input (LSB)
28	GND	Ground
29	R5	Red data input (MSB)
30	R4	Red data input
31	R3	Red data input
32	GND	Ground
33	R2	Red data input
34	R1	Red data input
35	R0	Red data input (LSB)
36	GND	Ground
37	GND	Ground
38	DCLK	Sample Clock
39	GND	Ground
40	LR	Left/Right Control signal

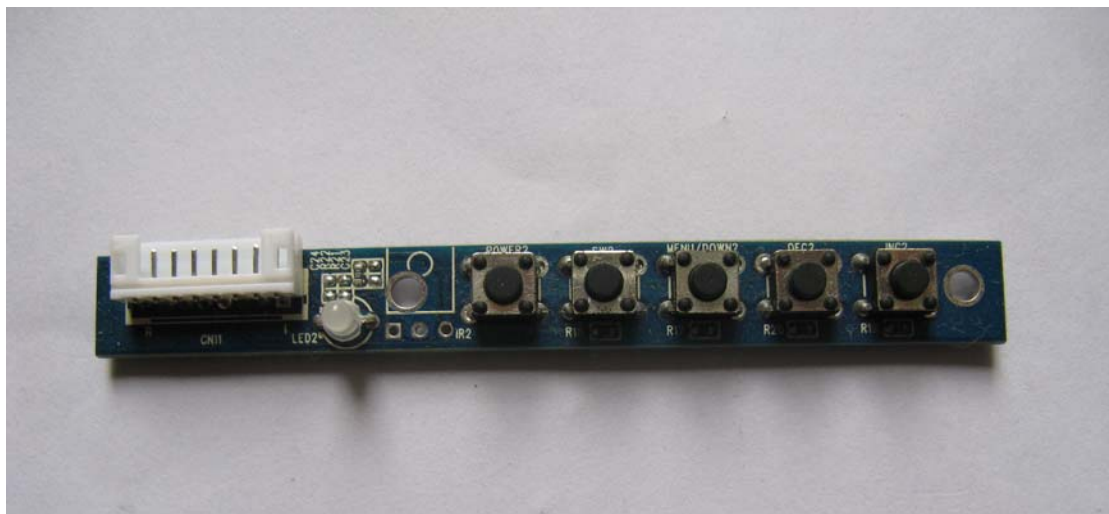
## H. REMOTE ( NEC CODE ) AND KEY BOARD

### ● REMOTE

Complete OSD Function and IR Function ( NEC CODE ) ,could be modified to meet different requirements of customers.

**NOTE:** The all Remote keys could be defined any function you want.

### ● KEY BOARD



**POWER      SOURCE      MENU/DOWN      MINUS      PLUS**

**POWER :** Power on/off.

**SOURCE :** Switch the input source.

**MENU    :** OSD on/Page move.

**MINUS    :** Minus value and save.

**Manual Adjust Test Pattern when No SYNC Input at VIDEO Channel**

**PLUS    :** Plus value and save.

**AUTO Loop Test Pattern when No SYNC Input at VIDEO Channel**

**NOTE:** The all Keyboard keys could be defined any function you want.

## I. OSD Function

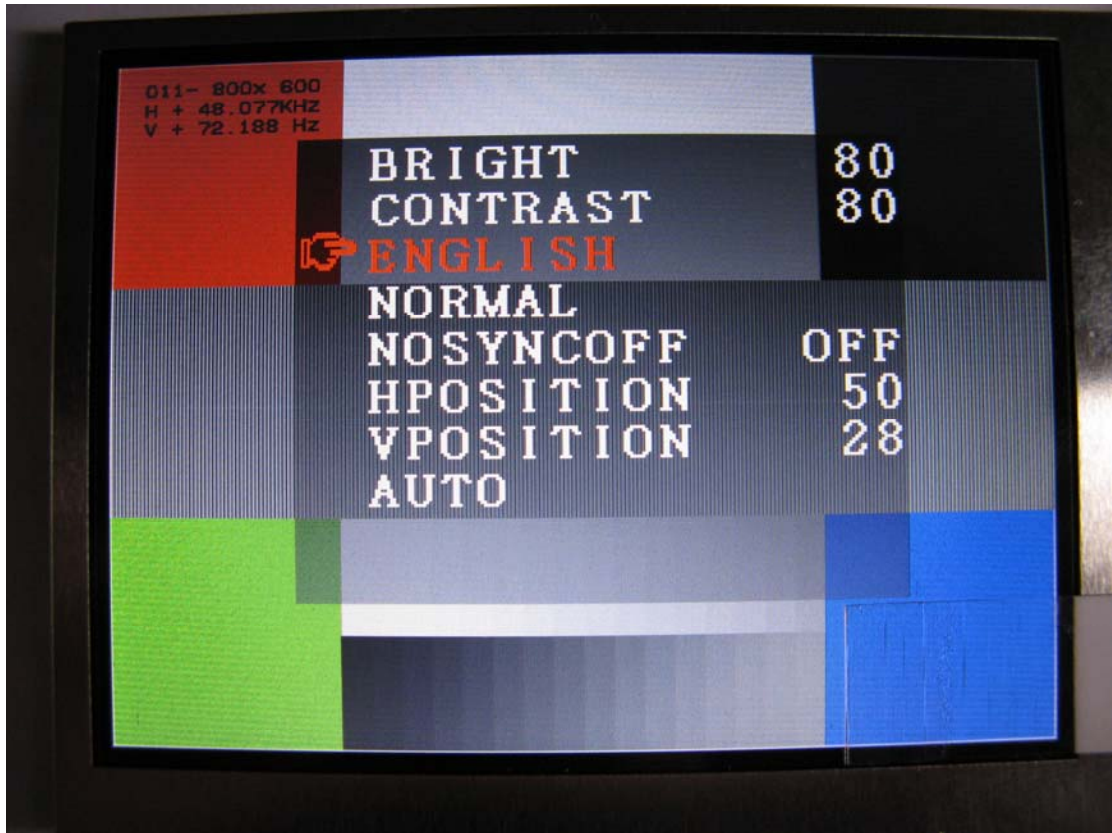
VIDEO Channel:



YPBPR Channel:



VGA Channel:



## J. Connect Example

